CLAIMS

1. A bioinformatically detectable novel viral gene encoding substantially pure nucleic acid wherein:

RNA encoded by said bioinformatically detectable novel viral gene is about 18 to about 24 nucleotides in length, and originates from an RNA precursor, which RNA precursor is about 50 to about 120 nucleotides in length;

a nucleotide sequence of a first half of said RNA precursor is a partial inversed-reversed sequence of a nucleotide sequence of a second half thereof;

a nucleotide sequence of said RNA encoded by said novel viral gene is a partial inversed-reversed sequence of a nucleotide sequence of a binding site associated with at least one host target gene; and

a function of said novel viral gene is bioinformatically deducible.

2. A bioinformatically detectable novel viral gene encoding substantially pure DNA wherein:

RNA encoded by said bioninformatically detectable novel viral gene comprises a plurality of RNA sections, each of said RNA sections being about 50 to about 120 nucleotides in length, and comprising an RNA segment, which RNA segment is about 18 to about 24 nucleotides in length;

a nucleotide sequence of a first half of each of said RNA sections encoded by said novel gene is a partial inversed-reversed sequence of nucleotide sequence of a second half thereof;

a nucleotide sequence of each of said RNA segments encoded by said novel gene is a partial inversed-reversed sequence of the nucleotide sequence of a binding site associated with at least one target gene; and

a function of said novel gene is bioinformatically deducible from the following data elements: said nucleotide sequence of said RNA encoded by said novel gene, a nucleotide sequence of said at least one target gene, and function of said at least one target gene.

3. A bioinformatically detectable novel viral gene encoding substantially pure DNA wherein:

RNA encoded by said bioinformatically detectable novel gene is about 18 to about 24 nucleotides in length, and originates from an RNA precursor, which RNA precursor is about 50 to about 120 nucleotides in length;

a nucleotide sequence of a first half of said RNA precursor is a partial inversed-reversed sequence of a nucleotide sequence of a second half thereof;

a nucleotide sequence of said RNA encoded by said novel gene is a partial inversed-reversed sequence of a nucleotide sequence of a binding site associated with at least one target gene;

a function of said novel gene is modulation of expression of said at least one target gene; and

said at least one target gene does not encode a protein.

4. A bioinformatically detectable novel gene according to claim 1 and wherein said function of said novel gene is bioinformatically deducible from the following data elements:

said nucleotide sequence of said RNA encoded by said bioinformatically detectable novel gene,

a nucleotide sequence of said at least one target gene; and

a function of said at least one target gene.

5. A bioinformatically detectable novel gene according to claim 1 and wherein said RNA encoded by said novel gene complementarily binds said binding site associated with said at least one target gene, thereby modulating expression of said at least one target gene.

6. A bioinformatically detectable novel gene according to claim 1 and wherein:

said binding site associated with at least one target gene is located in an untranslated region of RNA encoded by said at least one target gene.

7. A bioinformatically detectable novel gene according to claim 5 and wherein:

said function of said novel gene is selective inhibition of translation of said at least one target gene, which selective inhibition comprises complementary hybridization of said RNA encoded by said novel gene to said binding site.

8. A vector comprising the DNA of claim 1.

9. A method of selectively inhibiting translation of at least one gene, comprising introducing the vector of claim 8 into a cell.

10. A method according to claim 9 and wherein said introducing comprises utilizing RNAi pathway.

11. A gene expression inhibition system comprising:

the vector of claim 8; and

a vector inserter, functional to insert said vector of claim 10 into a cell, thereby selectively inhibiting translation of at least one gene.

12. A probe comprising the DNA of claim 1.

13. A method of selectively detecting expression of at least one gene, comprising using the probe of claim 12(14).

14. A gene expression detection system comprising:

the probe of claim 12; and

a gene expression detector functional to selectively detect expression of at least one gene.

15. An anti-viral substance capable of neutralizing said RNA of claim 1.

16. A substance according to claim 15 and wherein said neutralizing comprises complementarily binding said RNA.

17. A substance according to claim 15 and wherein said neutralizing comprises immunologically neutralizing.

18. A method for anti-viral treatment comprising neutralizing said RNA of claim 1.

19. A method according to claim 18 and wherein said neutralizing comprises:

synthesizing a complementary nucleic acid molecule, a nucleic sequence of which complementary nucleic acid molecule is a partial inversed-reversed sequence of said RNA; and

transfecting host cells with said complementary nucleic acid molecule, thereby complementarily binding said RNA.

20. A method according to claim 18 and wherein said neutralizing comprises immunologically neutralizing.